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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/018,363

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Atsushi Nakamura

2001-1856

7857

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7590

03/03/2005

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EXAMINER

HUBER, PAUL W

ART UNIT

PAPER NUMBER

2653

DATE MAILED: 03/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/018,363	<b>Applicant(s)</b> NAKAMURA ET AL.	
	<b>Examiner</b> Paul Huber	<b>Art Unit</b> 2653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-69 is/are pending in the application.
- 4a) Of the above claim(s) 1,3,5-8,10-21,23,26 and 28-69 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,4,9,22,24,25 and 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                                                        |                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/03; 8/03; 12/01</u> . | 6) <input type="checkbox"/> Other: _____                                                |

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Applicant's election of Group II & Species 3 (Fig. 12), claims 2, 4, 9, 22, 24, 25 & 27, in the reply filed on November 12, 2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2, 9, 22, 25, & 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Toshihisa (JP-11003550).

Regarding claims 2 & 22, Toshihisa discloses an optical disc drive (see figure 1), comprising: an optical disc 1 having plural data layers 1A-1C; a laser drive means 16, 17 for driving a semiconductor laser 21; a converging means 23 for converging a light beam on the optical disc 1, the light beam being light output from the semiconductor laser 21 driven by the laser drive means 16, 17; a focus control means 13 for controlling a focal position of the convergence point of the light beam converged by the convergence means 23 on the optical disc 1; a tracking control means 14 for positioning the convergence point of the light beam converged by the convergence means 23 on a track of the optical disc 1; and a photodetection means 24 for detecting reflection of the light beam from the optical disc 1. Toshihisa further teaches a convergence detection means 6 for detecting convergence of the light beam emitted to the plural data layers of the optical disc 1, wherein the optical disc drive controls the laser drive means 16, 17 based on output from the convergence detection means 6, and sets light beam emission power when recording or reading the disc separately for the plural data layers of the optical disc 1. See abstract. "Light beams having a proper power in accordance with the recording layer and the radial position of a recording medium 1 can be outputted. Moreover, this power control part 16 changes over the power of the light beam to a proper value in operations of the recording,

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the erasing and the reproduction. Further, the control part 6 (claimed "convergence detection means 6") performs a trial writing operation on an information track at the prescribed recording layer and the prescribed radial position of the medium 1 as necessary to select the optimum conditions of the recording, the erasing and the reproduction based on the inspection of the reproduced signal".

Regarding claims 9 & 27, in order for the tracking control means 14 to position the convergence point of the light beam converged by the convergence means 23 on a track of the optical disc, the tracking control means 14 detects guide grooves (tracks) preformed on the optical disc. Note lands & grooves of layers 1A-1C of figure 1, wherein the convergence point of the light beam is converged on a preformed groove track. Therefore, the detection value output by the convergence detection means 6 is the result of the photodetection means 24 detecting guide grooves preformed on the optical disc 1.

Regarding claim 25, a control part 6 (claimed "convergence detection means 6") initially "calculates a layer number and a radial position on which light beams are radiated based on address information..." (abstract). Accordingly, in order for the control part 6 to perform a trial writing operation on an information track at the prescribed recording layer and the prescribed radial position of the medium 1 as necessary to select optimum conditions of the recording, the erasing and the reproduction, the control part 6 first detects a prewritten signal (address information) from a read-only area of the optical disc.

Claim 4 is rejected under 35 U.S.C. 102(b) as being anticipated by Takeya et al. (EP-0807926).

Takeya et al. discloses an optical disc drive (see figure 1), comprising: an optical disc 20 having plural data layers; a laser drive means for driving a semiconductor laser; a converging means for converging a light beam on the optical disc 20, the light beam being light output from the semiconductor laser driven by the laser drive means; a focus control means 30 for controlling a focal position of the convergence point of the light beam converged by the convergence means on the optical disc 20; a tracking control means 37 for positioning the convergence point of the light beam converged by the convergence means on a track of the optical disc 20; and a photodetection means for detecting reflection of the light beam from the optical disc 20. Takeya et al. further teaches that "in case that the read device is driven to move the objective lens in a focus direction of the objective lens between the layers, by the drive device, at least one of the gain value and the equalizer value of the focus servo loop for each of the layers is measured on the basis of the focus error signal of each of the layers..." (col. 5, lines 37-43). Therefore, Toshihisa further teaches an equalization control means for controlling the equalization characteristics of photodetection means output (in the focus servo loop), and a convergence detection means for detecting convergence of the light beam

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(detected focus error signal) emitted to the plural data layers of the optical disc 20, wherein the optical disc drive sets the equalization characteristics for each of the plural data layers based on output from the convergence detection means.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Toshihisa, as applied to claim 22 above, in further view of Nishiuchi et al. (USP-6,771,587).

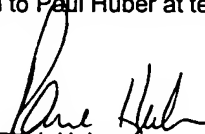
Toshihisa discloses the invention as claimed, but fails to specifically teach that the optical disc 1 includes an adhesive layer for bonding a first substrate, having a first data layer and a transparent reflection layer formed on the first data layer, and a second substrate having a second data layer with the first data layer and second data layer facing each other. However, Nishiuchi et al. teaches an optical disc (fig. 1) which includes an adhesive layer 5 for bonding a first substrate 1 having a first data layer 2 and a transparent reflection layer formed on the first data layer, and a second substrate 3 having a second data layer 4, in the same field of endeavor, for the purpose of obtaining "an optical information recording medium having a satisfactory durability against change in the environment" (col. 13, lines 24-26). See also, col. 11, lines 24-41, and col. 13, lines 4-23.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Toshihisa such that the optical disc 1 includes an adhesive layer for bonding a first substrate, having a first data layer and a transparent reflection layer formed on the first data layer, and a second substrate having a second data layer with the first data layer and second data layer facing each other, as taught by Nishiuchi et al.. A

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practitioner in the art would have been motivated to do this for the purpose of obtaining "an optical information recording medium having a satisfactory durability against change in the environment" (col. 13, lines 24-26).

Any inquiry concerning this communication should be directed to Paul Huber at telephone number 703-308-1549.



Paul Huber  
Primary Examiner  
Art Unit 2653

pwh  
March 1, 2005